#### Where, on Earth, are you?

We all live on a big planet called Earth, of course. But...where on Earth? And if you want to go to a different spot on Earth other than the spot you are in, how do you know which direction to go in? A map will help you with both of these things!

Maps help us see large areas of the world—or a country, town, or even your neighborhood, in a much smaller picture. By looking at the smaller picture, you can find where you are, then find where you want to go—and see the roads that will take you there!

Today, roads have either names or numbers. When you start your trip, you just follow the real signs on the roads that match the names and numbers on the map.

When you look at a map, it may look like there is only 1 inch between you and where you want to go. How can that be right? It isn't!

Maps are drawn to make everything look smaller. Mapmakers reduce the size of everything...so they must reduce the distance between things too. To do this, mapmakers use a "*line scale*." Everything on the map is adjusted to the "*scale*."

The *scale* tells you how much *distance* on the map equals how much *distance* on the land. For instance, 1 inch on the map may really be equal to 10 miles *distance*.

Every map should have a *scale*. They often look like this:



This scale is telling you that every inch on the map is equal to ten miles. (Miles are used in the United States. Many other countries use kilometers instead.)

A long time ago, people drew maps to help each other find places too. They drew them on rocks, in the dirt, and sometimes on parchment (animal skins).

If someone wanted to show their friend where a nice waterfall was, they might have drawn a map. Not knowing how to write words yet, they drew pictures of *landmarks*—things that their friend would pass by on the way—and drew a line in the *direction* they should go.

# Where, on Earth, are you? (Cont'd)

Ancient people didn't have clocks yet, and they didn't know how to measure **distance**. They kept track of time by counting the days and the moons. When they drew maps, they often added pictures of the sun. A picture of the sun meant that a certain **distance** would take 1 day to travel.

A map to the waterfall may have looked something like this.

Each sun stands for a day. 1 day to reach the big tree, take another 2 days to reach walking will bring you to the

This map shows the *direction* to look for. It shows *distance* (suns) the journey will take.



This map says that it will take and if you stay to the left, it will the ponds. One more day of waterfall by the mountains.

to go in. It shows *landmarks* by marking how many days

The *landmark* symbols on this map are easy to understand—trees, water, and mountains.

Today's maps use many symbols that are not so clear. Mapmakers make a list of what their symbols stand for. This list is called a *legend*. Somewhere on all good maps, you will find the *scale* and the *legend*. The *legend* could look like this:

#### LEGEND

colorful and fancy.



Most maps also have a *compass rose*. These are round symbols with points around the edges. One of the points will be marked with an "N" to tell you which

way is North. The *compass rose* of some maps are very

#### Where, on Earth, are you? (Cont'd)

Maps are always drawn with North being at the top. You can find which way is North from where you are by watching where the sun rises and sets. The sun always rises in the East. It sets in the West. If you face the sunrise, North will be on your left side and South will be to your right.

Today there are many kinds of maps. There are land maps and maps of the surface of the sea. Maps of the sea are usually called *charts*. Years ago, sailors did not go too far from shore. The charts showed the shoreline with bays and harbors. Sea monsters were drawn on the edges of the charts because no one knew what was out there! There are now maps of the ocean floors and maps of sea currents. Maps of the ocean floors are very hard to make!

"*Relief*" maps are like molded models. You can feel the shape of the land when you touch them. With today's technology, we have air maps for pilots, weather maps, and maps of the stars and the moon. But long ago, maps were very hard to make. Many explorers lost their lives trying to chart newly discovered lands.

Today, we have "*surveyors*"—people who use special instruments to judge distance, angles, heights, and other figures the mapmakers will need. (George Washington was once a surveyor!)

Then all the information, along with photographers and anything else useful, is given to the people who draw the maps. These folks are called "*cartographers*." They are the mapmakers of today.

The earliest map known was from Babylonia, which is now the country of Iraq. Scientists figure it was made sometime in 500 –2300 B.C. It simply shows an important river of the area (the Euphrates), a square for the city of Babylonia itself, two circles for the two known neighborhoods (Assyrians and Chaldeans), and islands off the land that were the supposed home of creatures they had heard about.

Humans have come a long way in discovering and mapping out the earth. But we are still not finished! Antarctica, at the South Pole, is the last continent to be mapped. Scientists and explorers are still mapping Antarctica today.

Now, if you want to tell your friend about a great park to go to, and they don't know how to get there, maybe you could draw them a map. A simple map might look like this:

## Where, on Earth, are you? (Cont'd)



You can fill in the names of the streets. You can make-up a scale, to give them an idea of the distance...or you could draw pictures of suns or quarter suns to give them an idea of how long it will take to get there!

## Where, on Earth, are you? Questions

#### Section One: True or False

- 1. Maps take large areas and reduce them to smaller pictures of the area.
- 2. Today's roads have either names or numbers to mark them.
- 3. A scale on a map tells you how heavy the map is.
- 4. You can tell what distance your trip will be by looking at the map scale.

5. Landmarks are things to look for on your way so you know you are going in the right direction.

-----

\_\_\_\_\_

-----

# Section Two: Choose the correct word from the list below to fill in the blank.

- 1. A map's \_\_\_\_\_\_ will tell you what its symbols stand for.
- 2. A circle on the map with points, and an "N" for north, is called a
- 3. Maps are always drawn with the direction of \_\_\_\_\_at the top.
- 4. Maps for sailors are usually called \_\_\_\_\_.
- 5. The people who make maps today are called \_\_\_\_\_\_.

#### List of words:

\_\_\_\_\_•

Charts Sea maps Legend Circle of light Logo



North Compass rose Cartographers East Map-O-graphers

## Where, on Earth, are you? Answers

Section One: True or False

\_\_\_\_\_

- 1. T
- 2. T
- 3. F
- 4. T
- 5. T

Section Two: Fill in the blanks

- 1. Legend
- 2. Compass rose
- 3. North
- 4. Charts
- 5. Cartographers